Abstract Of The Disclosure

An ultrasonic flow sensor for measuring the volumetric flow rate of a flowing medium through a flow channel having a transducer array which is situated within the flow cross section of the flow channel and which generates ultrasonic waves which propagate in the flow cross section of the flow channel transversally to a flow direction of the flowing medium, the ultrasonic transducer array having an interlaid arrangement of transducer elements which act alternately as transmitting and receiving antennas, so that all emitted individual sound waves interfere to form common wave fronts.